CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR INTERNALLY MANAGED GLOBAL EQUITY INDEX FUNDS

May 12, 2008

This Policy is effective immediately upon adoption and supersedes all previous policies for Internally Managed Global Equity Index Funds.

I. PURPOSE

The CalPERS Total Fund Statement of Investment Policy, adopted by the CalPERS Investment Committee ("Committee"), sets forth CalPERS' overarching investment purposes and objectives with respect to all its investment programs.

This document sets forth the investment policy ("Policy") for the Internally Managed Equity Index Funds - ("Funds" or "Portfolios"). Throughout this Policy, Funds and Portfolios are used interchangeably. The design of this Policy ensures that the investors, managers, consultants, and other participants selected by the California Public Employees' Retirement System ("CalPERS") take prudent and careful action while managing the funds. Additionally, use of this Policy assures sufficient flexibility in managing investment risks and returns associated with the Funds.

II. STRATEGIC OBJECTIVE

Obtaining broad equity market exposure achieved by closely tracking the designated <u>benchmark</u> indices is the strategic objective of the Funds.

The Funds shall be managed to accomplish the following:

- A. Enhance CalPERS' total return;
- B. <u>Hedge</u> against active (pre-retirement) liabilities; and,
- C. Provide diversification to CalPERS' overall investment program.

III. RESPONSIBILITIES

- A. CalPERS' Investment Staff ("Staff") is responsible for the following:
 - 1. All aspects of portfolio management including monitoring, analyzing, and evaluating performance relative to the appropriate benchmark.

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- 2. Reporting internally to senior management concerning the implementation of this Policy. Staff reports will be prepared monthly to include, but not be limited to the following:
 - a. Current market value of the Portfolios;
 - b. Performance of the Portfolios versus the benchmarks as reported by the master <u>custodian</u>; and
 - c. <u>Performance attribution</u> analysis that accredits return to its causes.
- 3. Reporting to the Committee as needed about the performance of the Funds. The General Pension Consultant is responsible for reporting quarterly to the Committee, as described in section III.B.
- 4. Monitoring the implementation of, and compliance with, the Policy. Staff shall report concerns, problems, material changes, and all violations of Policies at the next Committee meeting, or sooner if deemed necessary. These reports shall include explanations of the violations and appropriate recommendations for corrective action.
- 5. Purchasing only securities that are outlined in this Policy.
- B. The General Pension Consultant ("Consultant") is responsible for:

Monitoring, evaluating, and reporting quarterly, to the Committee, on the performance of the Funds relative to the benchmarks and Policy. The Consultant is responsible for reporting any non-compliance issues in accordance with its responsibilities under its contract with CalPERS.

IV. PERFORMANCE OBJECTIVE AND BENCHMARK

A. Performance Objective

Achieving the return for the broad equity market is the performance objectives of the Funds. To accomplish this objective, using statistical models to approximate the return of the market, rather than replicate, may be more cost effective.

Return deviations between the Portfolios and the designated benchmarks are expected to be random. To account for the difference in the methodology for calculating the returns of the benchmarks and the Portfolios, the resulting return deviation may require an adjustment.

CalPERS shall set parameters in the statistical models it employs in such a manner that tracking error shall be within the following thresholds:

- Domestic Equity Index: <u>Forecasted tracking error</u> shall be within ± 50 basis points; realized returns should fall no more than 50 basis points below the benchmark over any 12 month period.
- Domestic Microcap Index: Forecasted tracking error shall be within ± 300 basis points; realized returns should fall no more than 300 basis points below the benchmark over any 12 month period.
- 3. International Equity Index: Forecasted tracking error shall be within \pm 25 basis points; realized returns should fall no more than 25 basis points below the benchmark over any 12 month period.
- 4. International Small/Microcap Index: Forecasted tracking error shall be within ± 300 basis points; realized returns should fall no more than 300 basis points below the benchmark over any 12 month period.
- 5. Emerging Markets Equity Index: Forecasted tracking error shall be within ± 300 basis points; realized returns should fall no more than 300 basis points below the benchmark over any 12 month period.
- 6. <u>Dynamic Completion Fund</u>: Forecasted tracking error shall be within \pm 150 basis points; realized returns should fall no more than 150 basis points below the benchmark over any 12 month period.

B. Benchmark

Independent sources are responsible for maintaining the benchmarks as well as calculating and reporting the return of the benchmarks to CalPERS.

- 1. Domestic: The benchmark for the Fund shall be the "<u>CalPERS Custom Dow Jones Wilshire 2500 Index</u>". This custom benchmark shall be constructed and maintained by Wilshire Associates. It shall be defined as the top 2500 securities of the Dow Jones Wilshire 5000 (excluding tobacco stocks) with dividends reinvested, and be based on market capitalization and annual <u>reconstitution</u>. Its composition shall provide broad market exposure to the total U.S. equity market while minimizing transaction costs.
- 2. Domestic Microcap: The benchmark for the Fund shall be the "CalPERS Custom Wilshire Microcap Index". This custom benchmark shall be constructed and maintained by Wilshire

Associates. It shall be defined as the Wilshire 5000 (excluding tobacco stocks) less the CalPERS Custom Wilshire 2500 Index stocks with dividends reinvested, and be based on market capitalization and annual reconstitution. Its composition shall provide the remaining exposure to the total U.S. equity market that the CalPERS Custom Wilshire 2500 Index omits.

- 3. International: The benchmark for the Fund shall be the "CalPERS FTSE All World, Developed, ex US, ex Tobacco, <u>Capitalization Weighted</u> Index".
- 4. International Small/Microcap: The benchmark for the Fund shall be the "CalPERS FTSE GEIS (Global Equity Index Series) Developed Small Cap, ex U.S., ex Tobacco, Capitalization Weighted Index".
- 5. Emerging Markets: The benchmark for the Fund shall be the "CalPERS FTSE GEIS All Cap Emerging Markets, ex Tobacco, Capitalization Weighted Index".
- 6. Dynamic Completion: The benchmark shall be the "CalPERS Custom DCF Benchmark" ("Benchmark"). A nationally recognized vendor experienced in constructing benchmarks shall develop and maintain this custom benchmark. Its construction shall be a function of the style and market capitalization biases generated by the Active Domestic Equity managers in the aggregate. The Benchmark shall complement the above-mentioned biases.

The Benchmark shall vary with time as changes occur in the <u>active manager program</u>. Changes to the program include alteration in the allocation to managers, the addition or deletion of managers, or changes in the active manager' benchmark as the market goes through its cycle. Consequently, the Benchmark may have risk exposures that differ significantly from CalPERS Custom Dow Jones Wilshire 2500 Index. Additionally, the composition of the Benchmark shall reflect the liquidity constraints encountered by large funds such as CalPERS.

V. INVESTMENT APPROACHES AND PARAMETERS

A. Investment Approaches

The Portfolios shall be managed in a structured fashion to achieve the stated performance objective. Structured investing can be achieved through replication or through an optimized, <u>sampled</u> approach to generate an actual Portfolio with risk characteristics closely resembling the benchmark. The actual implementation used for each Portfolio will be

dependent on the specific characteristics of the applicable benchmark. A benchmark with a broader number of constituents and greater exposure to small capitalization securities will typically not be replicated due to liquidity and trading cost considerations.

Where an <u>optimization</u> approach is employed, a statistical risk model is used to define and decompose the Portfolio's risk exposures versus those of the benchmark. <u>Fundamental risk models</u> measure stock returns associated with industry and other fundamental factors such as domicile, <u>price/earnings</u> (P/E), yield, and market capitalization. Such fundamental factors are referred to often as "common factors".

A common factor is an element of return that influences many securities and, hence, is a "common factor" in the returns on those securities. Based on the current Portfolio's exposure to country, industry, and common factors, the volatility of returns can be estimated. The information about volatility produced by a fundamental risk model can be used to evaluate Portfolio risk, decompose Portfolio risk according to common factor exposures, and evaluate how much of a Portfolio's return in a given period was due to each common factor exposure and how much was due to stock selection.

B. **Specific Risk** Parameters

Specific risk parameters shall limit the return deviation of the Portfolio versus the benchmark. Use of a number of different models shall ensure that the risk parameters are within an acceptable tolerance level to achieve the performance objectives. Since CalPERS may add or eliminate models, the specific risk parameters for each model are detailed in the Procedures Manuals.

Implementation of this program shall comply at all times with CalPERS' investment policies including, but not limited to, the following:

- 1. Emerging Equity Markets Principles;
- Statement of Investment Policy: Development of Derivatives Strategies; and
- 3. Proxy Voting Policies.

C. Restrictions

The Portfolio may not purchase the securities of primary tobacco companies as identified by the Investor Responsibility Research Center Tobacco Company List.

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D. Permissible Securities

- 1. Equity and associated securities of global publicly traded companies.
- 2. The Portfolio may hold securities not represented in the designated benchmark. Generally, these holdings in aggregate shall be limited to less than 3% of the Portfolio's total market value. Such holdings are justified by the following reasons:
 - a. Liquidity constraints or excessive transaction costs, such as those required to sell certain securities obtained from corporate actions or from past benchmark reconstitutions; or
 - b. Are held as a proxy for a benchmark asset that is illiquid or unavailable; or
 - c. Expectation of inclusion in the benchmark at the next reconstitution.
- 3. Derivatives, as detailed in Section VII.

E. Corporate Actions

Corporate actions (e.g., <u>tender offers</u>, <u>mergers</u>, <u>Dutch-auctions</u>, or <u>spinoffs</u>) shall be handled on a case-by-case basis.

Companies which offer discount <u>Dividend Reinvestment Programs</u> (DRIP) and similar programs will be analyzed to determine if return enhancement can be added by participating in such programs.

F. Rebalancing and Trading Activity

The rebalance decision for any Portfolio is primarily based upon analysis of risk and potential performance deviation from the benchmark. Portfolio rebalancing shall be performed as necessary to maintain the Portfolio's risk characteristics in accordance with those of the benchmark. At a minimum, the Portfolio shall be reviewed monthly and at reconstitutions. The Portfolios will be analyzed to reduce systematic and nonsystematic risk while minimizing transaction costs.

A variety of trading techniques and liquidity sources shall be utilized to obtain best execution of the approved trade list.

Transaction cost analysis shall be performed and evaluated on a quarterly basis for monitoring trading efficiency as compared to that of a like universe. An outside vendor may prepare this analysis.

G. Strategy Monitoring

A monthly reporting package shall be prepared for each strategy by the Internal Equity staff assigned to manage the strategy. The reports to be included shall be those needed and appropriate to allow monitoring by more senior Internal Equity staff of the management process, risk acceptance and performance of each strategy. This reporting package may vary depending on the management process, benchmark and performance objective unique to each strategy and shall be described in the procedures manual.

The Consultant shall include strategy level information in their quarterly report to the Committee.

VI. CALCULATIONS AND COMPUTATIONS

Investors, managers, consultants, and other participants selected by CalPERS shall make all calculations and computations on a market value basis as recorded by CalPERS' Custodian.

VII. <u>DERIVATIVES</u> AND <u>LEVERAGE</u> POLICY

A. Strategies

The Fund may utilize financial <u>futures</u>, <u>equity swaps</u> and <u>options</u> in the Portfolio for the following purposes:

- 1. Permitting the investment of dividends received;
- 2. Equitizing cash and dividends receivable;
- 3. Allowing adjustment of the Portfolio's risk characteristics in the most cost effective manner available:
- 4. Facilitating investment of cash flows related to contributions, withdrawals, or asset allocation compliance.

B. Justification

Justification for the above mentioned strategies includes the following:

- 1. Reducing transaction costs in comparison with the purchase of underlying securities;
- 2. Equitizing non-spendable cash exposures (e.g. dividend accruals) to get a highly correlated return on that component of the Portfolio;
- Providing the ability to alter risk characteristics versus the benchmark without disrupting the underlying Portfolio or unnecessarily increasing turnover; and
- 4. Obtaining matched returns between the benchmark and the Portfolio through investment in custom equity swaps and currency forwards.

C. Restrictions

Restrictions on the above mentioned strategies include the following:

- 1. Writing <u>uncovered calls</u> is prohibited;
- 2. Leveraging is prohibited. The use of futures contracts as specified in this Policy will not constitute leverage;
- 3. With the exception of equity swaps and currency forwards, trading non-exchange traded derivatives is prohibited;
- 4. Speculating is prohibited;
- 5. Use of non-CFTC approved futures contracts is prohibited; and
- 6. Portfolio specific position limits will be established and monitored as detailed in the applicable procedures manual.

D. Permissible Derivatives

Derivatives utilized in the index Portfolio may include, but are not limited to the following:

- 1. Index futures:
- 2. Style futures;
- Index options;
- 4. Currency forwards;

- 5. Equity swaps;
- 6. Exchange Traded Funds (ETF); and
- 7. Closed End Funds.

E. Futures Commission Merchants (FCM)

Futures Commission Merchants are selected with the following broad range of criteria:

- 1. Low cost clearing and executing charges;
- 2. Securely capitalized firm;
- 3. Clear account statements and efficient reconciliation:
- 4. Responsive personnel;
- 5. Discrete and efficient operation;
- 6. Personal interview; and
- 7. Reference checks.

VIII. GLOSSARY OF TERMS

Key words used in this policy are defined in CalPERS' Master Glossary of Terms.

<u>Domestic Equity Index Fund – Internally Managed</u>

Adopted by the Investment Committee: September 16, 1996

Revised by the Policy Subcommittee:

Approved by the Investment Committee:

Revised by the Policy Subcommittee:

Approved by the Policy Subcommittee:

Approved by the Investment Committee:

May 13, 1999

August 16, 1999

December 8, 2000

March 19, 2001

Name Change to Equity Index Funds – Internally Managed
Revised by the Policy Subcommittee: March 11, 2005
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Name Change to Internally Managed Global Equity Index Funds

(incorporates DCF policy)

Revised by the Policy Subcommittee: March 17, 2008 Approved by the Investment Committee: April 21, 2008

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